

broken out near the middle of the left side, and not far from the sinus of the aperture. The opening was of a semilunar form, about $1\frac{3}{4}$ inch long, with an average breadth of half an inch. A new deposit of testaceous substance, together with a broken fragment, has closed the opening in the rude manner common in the shells of Mollusca.

But the most extraordinary circumstance is this : that a fragment, which was broken out in the accident which befell the animal, now constitutes two-thirds of the repaired portion, and that the originally inner surface is now the outer surface, as is evident from its concavity, style of undulation, and texture. It is also nearly at right angles to its original position. These facts show that the piece was totally detached from the shell by the accident.

We apprehend that a case could scarcely occur, especially in a shell moving in water, except in consequence of the functions now ascribed to the vela of the Argonaut. These once-reputed sails, performing the less poetic function of clasping and enveloping the shell, prevented the loss of the large fragment.

It is obvious also that the new deposit of testaceous matter was secreted from the part of the animal within the shell, and not from the vela, since the edges of the original shell around the fracture appear exclusively on the outside.

Since none but the original inhabitant of the shell could repair it, the case described is corroborative of the opinion, that the animal usually seen in these shells is the original owner.—*From Silliman's Journal for July 1848.*

Notes on Chalcidites and other Insects.

By FRANCIS WALKER, F.L.S.

A LARGE woody gall is not uncommon on the twigs of the willow ; it is inhabited by the grub of *Cecidomyia Salicis*, which is often a victim to its enemies, and does not attain the fly state ; this is in accordance with the law of nature which ordains a rapid diminution of the individuals of most kinds before they attain their last form, and thus their increase and the consumption of their food is lessened, and their consequent starvation is prevented. Some of these galls which I collected in the spring produced six or seven of the *Cecidomyia*, and the following numbers of parasites :—

Pteromalus (Seladerma) Salicis, 67 males and 71 females = 138.
(I have also found it in Finmark.)

Encyrtus Tennes, 10 males and 64 females = 74.

Platygaster niger, 115, chiefly females.

Tetrastichus flavo-varius (*Eulophus flavo-varius*, Nees = *Tetrastichus Armaeus*, List of Chalcidites in the British Museum, 74). This fly has been reared from a larva in the buds of *Ulex nanus* by Mr. Clear of Cork, who has also obtained *Encyrtus serricornis* from a pupa of one of the *Hepialidæ* ? ; “ the original inhabitant was completely consumed, and nothing left but a transparent film.”

Aglenes brunneus. This little beetle, remarkable for having no eyes, is not uncommon near London, and at Aix-la-Chapelle it was given to me by M. Foerster, in whose work on Chalcidites (*Monographie der Pteromalinen*) there are the following synonyms :—

Pteromalus multicarinatus, *Foerster* = *Pteromalus Catillus*, *Walker*.

prætermisus,	„	=	longicornis,	„
chalcolampus,	„	=	bracteatus,	„
delectus,	„	=	herbidus,	„
chalcophanes,	„	=	apertus,	„
nubeculosus,	„	=	fumipennis,	„
statutus,	„	=	affinis,	„
psittacinus,	„	=	{ muscarum,	„
			{ Thessalus,	„
vorax,	„	=	Mutia,	„
acuminatus,	„	=	mesochlorus,	„
crassus,	„	=	berylli,	„
quæsitus,	„	=	hilaris,	„
operosus,	„	=	futilis,	„
subniger,	„	=	subniger,	„
opulentus,	„	=	decisus,	„

Callimome Nephthys, fem. *Cyaneo-viridis*, *antennis nigris*, *pedibus viridibus*, *tarsis piceis basi flavis*, *oviductu thoracis longitudine, alis sublimpidis*.

Head and thorax finely granulated; head blue, a little broader than the thorax: antennæ black, clavate, compact, not longer than the body; first and second joints dark blue: thorax green, tinged with blue: abdomen smooth, shining, bluish green, shorter than the thorax; base bright blue: sheaths of the oviduct black, about half the length of the body: legs dark green; knees and tips of the tibiæ pale yellow; fore tibiæ yellow with a piceous line above; fore tarsi pale brown; middle tarsi and hind tarsi piceous, pale yellow at the base: wings slightly tinged with brown; squamulæ fulvous; nervures brown. Length of the body $1\frac{1}{4}$ line; of the wings 2 lines.

Found by Mr. Hardy near Newcastle. It has some resemblance to *C. gracilis*, but is quite distinct.

Callimome Ærope?, fem. *Aurea*, *antennis piceo-fulvis basi flavis*, *pedibus flavis*, *oviductu brevi*, *alis flavescens*.

Bright gold colour, tinged with green: head a little broader than the thorax: eyes and ocelli dark red: antennæ clavate, shorter than the thorax; first and second joints yellow; third and following joints pale rust colour with a black streak above which ceases before the tips of the antennæ: head and thorax finely punctured; the transverse striæ not so apparent as in some other species: abdomen elliptical, smooth, shining, shorter than the thorax; metapodeon slightly impressed at the base, occupying nearly one-half of the dorsum; octoon short, visible on each side but hidden above; ennaton rather short, finely striated; decaton longer than the ennaton, also finely striated; the following segments very short, slightly hairy: abdomen keeled

beneath ; the keel extending in a nearly straight line for almost two-thirds of its length, and thus terminating abruptly : sheaths of the oviduct black, hairy, about two-thirds of the length of the abdomen : legs bright yellow ; tips of the tarsi black : wings limpid ; fore wings slightly clouded with yellow beneath the ulna ; nerves yellow ; ulna much shorter than the humerus ; radius not more than one-third of the length of the ulna ; cubitus extremely short ; stigma very small. Length of the body $1\frac{1}{4}$ line ; of the wings 2 lines.

Found on the banks of the river Lea in July. This is probably the female of *C. Ærope* (see Ann. of Nat. Hist. xiv. 182).

On the Habits of the Tawny Owl, Strix Stridula.

By RALPH CARR, Esq.

This bird does not seem to be known as a bold and rapacious robber of the nests of some of our stronger birds at the time when it is feeding its own young. It has been protected now for a few years at Dunston Hill. In 1844 a pair of tawny owls reared and ushered into the world three hopeful young, after having fed them assiduously upon the trees for many weeks after they had left the nest. The food must often have consisted in great part of worms, snails, and slugs, for the old birds brought it every minute from the ground in the immediate vicinity of the trees where the young were perched. This however might only be considered as a whet to their appetites before dinner ; for the parents made repeated and persevering attacks upon three or four magpie nests, sometimes during half an hour at a time. As the defence was spirited and gallant, they were often repulsed ; but, finally, I found the remains of young magpies under the favourite perch of the young owls, and one morning the bloody head and feathers of an old magpie, conspicuous from its size and the want of any cerous skin about the beak. This then, I thought, must have been taken when roosting. In 1845 the old owls alone were seen, and they passed the summer in sedate retirement, and seemed to rest from the labours of propagation ; neither did they molest the magpies. But in 1846 they began to be very active early in the spring, and by the beginning of May again had their young owlets out upon the branches. Walking out about nine o'clock one evening, I heard a pertinacious attack going on against a pair of magpies that had their nest in the top of a very tall sycamore. At last, instead of the frantic chattering of the poor magpies, one of them began to shriek in agony like a hare when caught in a noose ; and it was evident the owl was endeavouring to drag it out—the mother bird—by the head from the entrance of the nest. I ran down to the spot to prevent the perpetration of such murder, and arrived in time to separate the combatants by striking against the stem of the tree with a stick. Before the next morning the young of our only pair of rooks had disappeared from the nest, in a situation where nothing but the owls could have injured them. This was too bad ; a decree went forth against the young owls, and they paid the penalty of their voracious appetites.

It is thus evident that the magpie's instinct in arching over her